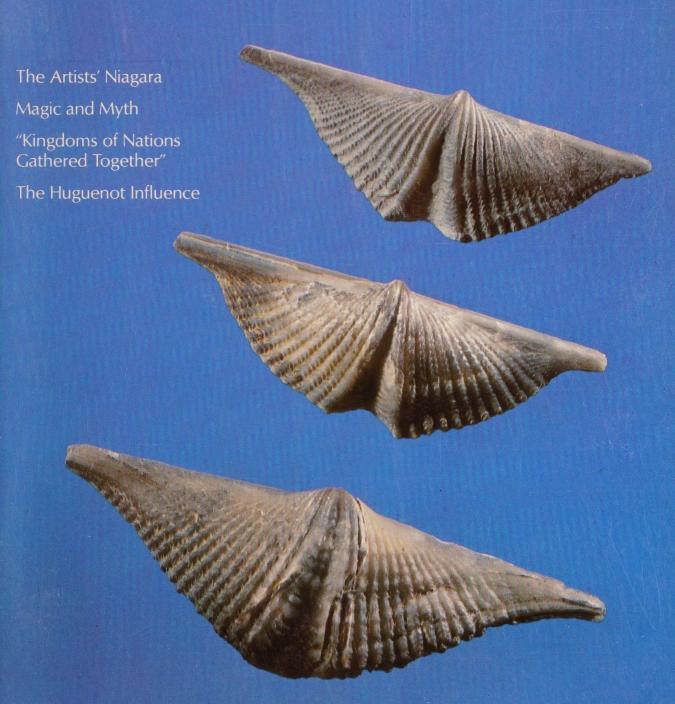
ROTUNDA

SUMMER 1979 VOLUME 12 NUMBER 2 \$2.00



Rotunda Price Change

We are sorry to have to announce that, because of continually rising costs, we are obliged to raise the price of *Rotunda*. An annual subscription (4 issues) will now cost \$6.50 and single copies will cost \$2.00. Paid-up subscriptions will be honoured at the old rate until they become due for renewal.

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ROTUNDA

the magazine of The Royal Ontario Museum

Volume 12, Number 2, Summer 1979

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Cover: Spiriferid brachiopods of the type referred to as "stone swallows" by the ancient Chinese. (Photo: Bill Robertson, ROM)

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Focus

On 1979—International Year of the Child

Mary Fitz-Gibbon

HE EXHIBITION Dolls of Many Cultures, mounted by the Department of Ethnology to honour all children and on display at the Royal Ontario Museum until July 9, has already attracted many enthusiastic viewers. What is more important is that visitors have the opportunity to study the accompanying material on 1979—International Year of the Child, supplied by UNICEF and set up in the adjacent gallery.

The International Year of the Child is focusing worldwide attention on the United Nations Bill of Rights for Children. In Canada these rights are taken for granted and infringements (when discovered) usually provoke a general outcry. According to UNICEF, "There exist today 350 million children in the developing countries who are denied even the minimum of basic, essential services in health, nutrition, education, and social development—the necessities we take for granted!" How does this statement relate to the ROM doll exhibit? It is its reason for being. Nations affiliated with the United Nations not only wish to support the Bill of Rights for Children but to increase public awareness of its existence and its terms. Thus it



becomes the responsibility of individuals and organizations to further this aim, and the doll exhibit is the Royal Ontario Museum's contribution.

Why have we used dolls? In several interesting ways dolls pinpoint the needs and rights of children. To begin with, most of them are playthings, and as such they demonstrate and support the fourth right of the child-full opportunity for play and recreation. In most societies both boys and girls play with dolls, and the attitudes of children towards their dolls reflect the attitudes of adults towards children. A child who exhibits violence towards a doll vents personal frustrations or repeats expressions of violence, felt or witnessed. Children love and care when they receive love and care. Positive patterns of behaviour in keeping with United Nations concepts for child care in the next generation can be reinforced when children play with dolls. When the child plays mother, father, teacher, dentist, doctor, fireman, or any other role with a doll, he or she can reinforce acceptable standards of "health, nutrition, education, and social development".

Because Canada is a cultural mosaic, the intermixing of dolls of many ethnic origins exemplifies efforts

UN Declaration of the Rights of the Child

The right to:

- · Affection, love and understanding
- Adequate nutrition and medical care
- Free education
- Full opportunity for play and recreation
- · A name and nationality
- · Special care, if handicapped
- Be among the first to receive relief in times of disaster
- Learn to be a useful member of society and to develop individual abilities
- Be brought up in a spirit of peace and universal brotherhood
- Enjoy these rights, regardless of race, colour, sex, religion, national or social origin

Right: A contemporary
Kwakiutl infant doll
swaddled in cloth
bindings and laid in a
wooden cradle. The doll
was made by Kate Scow
of British Columbia and
is on loan from The
Apple Doll.

Opposite page: Dolls
from Japan in
traditional costumes are
customarily displayed
only during the annual
Japanese "Girls'
Festival" held in Japan
in March. This festival
as well as being a gift of
pleasure from parent to
child teaches children
to honour elders and
Japanese tradition. ROM
Far Eastern Department
Collection.



towards acceptance, understanding, and respect for people of every race, colour, religion, and national and social origin. As well as playing with dolls of his or her own ethnic origin, it is important for the child to play with dolls of other colours, representing other religions, and in other costumes. Many dolls become mnemonic devices to aid in developing knowledge of religious and social customs.

The child sees the doll as a living being. Whether or not it has a face in reality, one exists for the child. A name is important, as it gives the doll an individual identity. A personality and a pattern of likes, dislikes, and individual abilities can be as recognizable in dolls as in the children who play with them. Nothing would be accomplished in the world if everyone chose the same profession or trade. Children discover this through playing with dolls, and they also learn to respect differences in others, if their own differences are respected. Even mass-produced plastic dolls, all identical, can become individuals if they are provided with different clothes, different names, and different hairstyles.

As Canadians we should accept and profit from every tessera of our vast cultural mosaic. Dolls may seem to be an oversimplification of so lofty an aim, but they do play a part in the lives of children.

Mary Fitz-Gibbon joined the Education Department of the ROM in 1950 and for the past several years has been a Research Assistant for the Department of Ethnology. Top: An enchanting Japanese doll wearing a kimono made in the 1930s. On loan from Kathy Pepper.

Bottom l. to r.: Small nun from Ireland, Sudanese dancing girl c. 1900, Japanese doll, Hopi wolf "Kachina", English doll, early Canadian cloth doll (lent by Black Creek Pioneer Village), Naskapi doll, early 20th century.





The Falls from the 1690s to the 1890s

The Artists' Niagara



Honor de Pencier

"A view of Niagara Falls in 1799" by Edmund Henn. Watercolour, 60.8 cm x 85.4 cm. Captain Henn was stationed in Canada from 1789 to 1800 with the 24th Warwickshire Regiment of Foot. HE CANADIANA DEPARTMENT, which houses the Sigmund Samuel Collection, is particularly strong in depictions of Niagara Falls in the 18th and 19th centuries. They include 134 watercolours and 122 prints of the falls and their surroundings, as well as oil paintings and rare books that illustrate this natural wonder of North America.

On 20 July 1979 an exhibition of part of this collection opens at the Canadiana Building—The Artists' Niagara, a colourful panorama of Niagara Falls as seen through various artists' eyes over two centuries. These early artists were not usually professionals. It was simply that the falls evoked creative responses in a society that enjoyed travelling and sketched as a hobby. Before 1800, when travel was difficult, only a small stream of visitors came to the area. As roads were built, more tourists arrived, and many of them produced sketches as personal records or

as illustrations for travel books and prints. Some of the later travellers were artists who subsequently worked their sketches into large-scale studio paintings.

Included in *The Artists' Niagara* will be many of the earliest known views, as well as some spectacular pictures of the falls—sketched from every possible angle, under the effects of different weather conditions, and at various times of the day and of the year. Not always as artistically impressive, but still of historical significance, are the illustrations of the changing points of interest that the tourists felt were worthy of their attention. They chose, for example, to sketch the famous Table Rock overlooking the Horseshoe Falls on the Canadian side. Goat Island was a popular subject, as were the rapids above the American Falls and the ferries below. The Terrapin Tower, wooden ladders, stairways, and other architectural curiosities formed an integral part of the artists' sketchbooks.

Illustrated rare books and guidebooks add to the historic perception of the falls, although discrepancies occur in the early written descriptions, which tended to be overly romantic and exaggerated. One illustrator notes that the cloud of spray above the falls could be seen distinctly with the naked eye from 70 miles away, and that the roar of the falls could be heard at a distance of 40 miles. Even estimates of the height varied —from 160 to 600 feet.

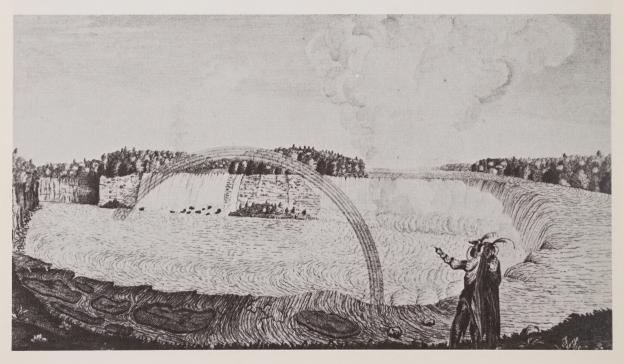
Just as the early descriptions of the "wonderful Downfall" were vague and sometimes inaccurate, so the early engravings of the phenomenon were often far from representations of the actual scene. Father Louis Hennepin's view, no doubt sketched from memory well after he had seen the falls in 1678, was first published

in 1697, and it became the model for many artists who had never been to the New World. In his fanciful image, Hennepin depicted the falls as being higher than they were wide, and he showed the Canadian Falls without the curve or angle that would have existed at that period (see Walter M. Tovell, The Niagara River, ROM ENCOUNTER SERIES).

Many of the prints that adhered to the Hennepin view incorporated slight changes to give them a touch of originality. About 1770, Henry Fuseli included a suggestion of the Great Lakes, as well as some high mountains, in the background of his Hennepin-like scene of the falls. Richard Hancock, in 1794, copied Hennepin's landscape closely, although he added exaggerated trees, and increased the group of viewers with some extravagantly costumed figures. Moreover, there appeared in his interpretation some curious labourers toiling down a trail with bundles on their heads.

A more accurate representation of the configuration of Niagara Falls is found in an engraving by Thomas Davies published in 1768 (after a sketch done about 1762). Davies was one of a large group of British officers and administrators, in Canada for a tour of duty, who had been taught to do topographical sketches as part of their military training. The Davies engraving, although stylized and linear in form, gives the viewer a sense of drama and involvement, and the Indians in the foreground add to the impression that the scene is indeed North American.

Whereas Davies chose to include in his illustration a large rainbow joining the two cataracts, other artists sketched different significant features of the falls that



impressed the early visitors. Lt. William Pierie's fairly accurate view of 1768, which was engraved in England, emphasizes the clouds of spray poised over the falls. and the many birds above them. Small rowboats, which ferried tourists back and forth across the river and were often crowded with too many visitors, appear in many early Niagara pictures, sometimes perilously close to the falls. John Vanderlyn, the first American artist to paint the falls, included in his print of 1804 two very small and fragile boats dancing on the rapids. Other details of visitors from afar and the local flora and fauna (including a coiled rattlesnake) enhance the study of life around the falls in the early days. Some of the largest general Niagara views which enrich our collection are the fine watercolours by military topographers Edmund Henn (1799), George Willis (1817), and Charles Ramus Forrest—who painted two, dated between 1821 and 1823.

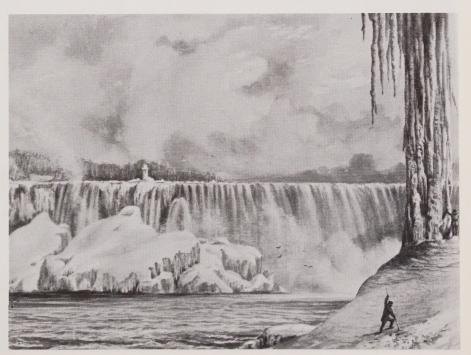
By the 1820s, hotels, museums, and architectural curiosities designed as viewing sites were appearing on both sides of the falls, to capitalize on this popular tourist attraction. Henry Barnard, James Cockburn, J. Richard Coke Smyth, and others show Clifton House, the most famous of the Canadian hotels. Brown's Hotel and Forsyth's Hotel can be identified in Cockburn's sketches of 1827, and on George Catlin's lithographed map of 1831. Fortunately, since it burned down in February of 1839, Cockburn also sketched the Pavilion Hotel in detail. Other buildings pictured include "Chinese pagodas" on both sides of the river, and often illustrated near the American Falls are the International Hotel and the Cataract House, as well as the Ferry House and the mills on the American shores.

Below: "Clifton House seen from Goat Island" by Lt. Gen. Sir Henry William Barnard, c. 1840. Watercolour over pencil, 42.8 cm x 33.0 cm. Biddle's Staircase was built on Goat Island to provide access to the foot of the gorge.



Opposite page: "An east view of the Great Cataract of Niagara" after a sketch by Thomas Davies, 1762. Engraving by J. Fougeron, London, c. 1768, 33.3 cm x 51.0 cm. This is one of the earliest views sketched not only with accuracy, but also with a sense of the wilderness of the New World.

Right: "Horseshoe Falls and Terrapin Tower in winter" by Frederick W. Lock, c. 1856. Water-colour, pen and sepia ink, 27.3 cm x 40.0 cm. The spray under the falls and the massive icicle on the Canadian side are rare but beautiful effects. This was probably a preparatory sketch for the lithograph of 1856.

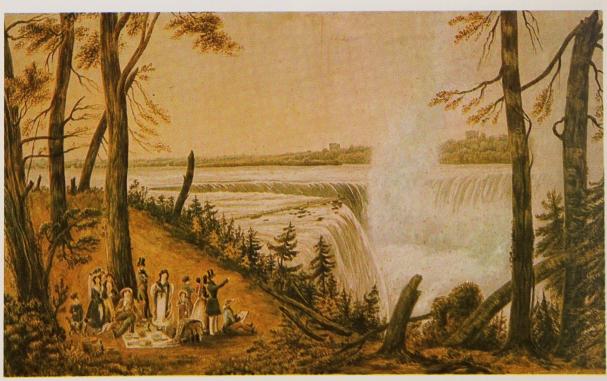


Augustus Porter, who with his family owned property around the American Falls, built a bridge over the rapids to Goat Island, enabling visitors to view the falls from a variety of new vantage points. In 1827 Captain Basil Hall, who drew the first accurate view of the falls with the help of his mirrored camera lucida, sketched and described in detail the dangers and difficulties encountered in the intricate construction of this bridge. The bridge and the surrounding rapids became a popular subject for many artists, including the British officers James Hope, James Cockburn, and Henry Barnard, and the American, George Catlin, famous for his paintings of Indians. Once Goat Island could be visited, it became a favourite spot for outings such as the elegant picnic painted by James Cockburn.

Augustus Porter once again changed the face of the falls in 1833 when he built the round Terrapin Tower over the rocks close to Goat Island at the edge of the Horseshoe Falls. Numerous views in the ROM collection indicate that this was a popular viewing spot from the beginning. In a detailed aquatint of 1828 by J. Gleadah, after a sketch by James Gray, figures can be seen standing on the rocks, dangerously close to the brink. Later, in a number of pre-1833 views, including that of Cockburn's picnic, a wooden walkway appears —built out onto these rocks to provide a thrilling if precarious viewing point. It was at the end of this walkway that the Tower was constructed, and it can be seen in almost every picture of the Horseshoe Falls for the next four decades. Not everyone cared that it was one of the best sites for viewing the falls; many Bottom: "Horseshoe Falls from Goat Island" by James P. Cockburn, 1831. Watercolour over pencil, 56.6 cm x 82.7 cm. This is one of Cockburn's six Niagara views that were engraved in aquatint by Ackermann & Co. in London in 1833.

Below: "Great Horse Shoe Fall, from the foot of the shaft below Table Rock" by Henry Samuel Davis, 1847. Chromolithograph by Thomas McLean, London, 1848, 61.6 cm x 54.0 cm.





people expressed their indignation that a private citizen should be allowed to mar the natural beauty of the falls with such a structure.

The other favourite place from which to enjoy an impressive view of the falls was Table Rock, a natural shelflike promontory close to the Horseshoe Falls and susceptible to collapse at any time. Portions of it did fall—in 1818, 1828, 1829, and 1850. If the viewer felt a certain lack of security here, the sublime experience was even more intense beneath Table Rock, where the force of the water could be felt as it dashed at the nearby rocks. Dramatic views of the falls from above and below Table Rock were sketched by almost everyone.

For quite a number of years a treacherous ladder and path next to Table Rock, often wet and slippery, provided the only means of descent to the gorge. By 1821, a covered spiral staircase had replaced the old ladder: it appears in Ralph Gore's painting of the falls dated that year, and he identifies it as the "...old Indian ladder now improved into a cover'd staircase". This tall vertical structure appears in many sketches. It was similar in appearance to the Biddle Staircase, which was built on Goat Island between the two main waterfalls in 1829, and was financed by Nicholas Biddle of Philadelphia, president of the Bank of the United States. The Biddle Staircase provided a means by which the tourists could see the falls from below, as well as visit the Cave of the Winds behind the American Falls.

The ferries, too, had to be reached by very long stairs, and in 1838 William Bartlett sketched both the

American ferry landing and the staircase leading to it, which had been built by Augustus Porter in 1825. A great convenience was added in 1845—cable cars were moved up and down the incline by means of a water wheel and a cable. The less elaborate Canadian ferry dock was situated below Clifton House, downstream from Table Rock. Another Canadian landmark which was the subject of a print was the Burning Spring, two miles above the falls. Here one could see, for a slight fee, water burning with a pale blue flame. One guidebook's explanation for this phenomenon was that the water was "charged with sulphuretted hydrogen gas".

Some of the memorable historic and social events around Niagara described in the guidebooks were also recorded by the artists. In two inaccurate prints, the burning steam packet Caroline is pictured going over the falls to dramatize an event that occurred during the 1837 Rebellion. Although the steamboat was cut from its moorings and set afire, it actually foundered and broke up among the rocks above the waterfall before it reached the brink. In 1839, when peace was restored, R.G.A. Levinge had time to sketch his fellow officers of the 43rd Light Infantry, and their ladies, as they enjoyed a sleighing outing near the falls while stationed at Niagara. The falls in winter were not frequently painted, but we do have sketches done from the lower shore by Frederick Lock and William Armstrong, both dating from the winter of 1855–56.

A guidebook to Niagara of 1839 describes the young English hermit who had chosen ten years earlier to settle in a cabin near the brink of the falls. One of his



"American Falls from Table Rock" by Augustus Köllner. Lithograph by Deroy, published by Goupil, Vibert & Co., New York and Paris, 1848, 35.4 cm x 47.0 cm.

habits was to hang by his arms over the falls from a piece of timber attached to the Terrapin Bridge. Sir James E. Alexander included such a figure in his watercolour of 1831, leaving a pictorial record of the legendary hermit whose story captured the attention of 19th-century falls visitors. Later accounts of these Niagara Falls personalities included the feats of the tightrope walkers, and there is in the ROM collection an unfinished watercolour sketch by William Armstrong of an unidentified person crossing the gorge.

The building of the famous Niagara Suspension Bridge about two miles below the falls in the 1840s and 1850s provided a new subject for the printmakers of the day. American and European firms enthusiastically added various views of the structure to their already vast pictorial output on the falls. Some discrepancies occur: Hall and Mooney in a lithograph of 1848 picture the preliminary cable construction with the basket ferry going over the gorge; in the same year, Augustus Köllner's "drawn from nature" scene shows a train and a carriage going across a completed bridge. Since the latter view was published in Paris, perhaps it

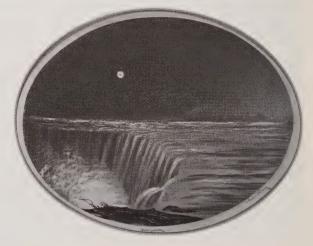
wasn't important that the bridge was actually an 8-foot-wide temporary wooden construction for nothing heavier than carriages. It wasn't ready for trains until seven years later, by which time it had been converted into a two-level bridge capable of carrying trains above and carriages below. The first locomotive crossed the bridge in March of 1855. In 1896, after various alterations had been made over the years, the upper suspension span was replaced with a steel arch beneath the bridge in order to support the increased weight of rail traffic. A large line engraving by John A. Lowell & Co. of Boston, 1898, illustrates the recently altered bridge with two trains approaching each other on the upper deck, and gives an impressive list of engineering statistics on either side of the title.

Some of the most spectacular of the Niagara views in the collection are seen in the set of four coloured lithographs of 1848 by Major Henry S. Davis. The ROM is fortunate in having the large, original watercolours of this group, including illustrations of the falls dramatically coloured by a sunset in one scene, and darkened by a storm in another. Other sets of Niagara



Above: "The 43rd Light Infantry as they 'turn out' in their sleighs at the 'Falls of Niagara' ",1839, by Sir Richard G.A. Levinge. Lithograph with watercolour by Ackermann & Co., London, 36.7 cm × 64.0 cm. Sir Richard's regiment was stationed at Niagara for peace-keeping purposes after the Rebellion of 1837–38.

Right: "Niagara Falls by moonlight" by William Armstrong, undated. Watercolour over pencil on prepared ground, 17.0 cm × 22.5 cm, oval. (Gift of the Imperial Order Daughters of the Empire, C.W. Jeffreys Chapter.)



prints of an earlier period include one by W.J. Bennett, published c. 1829 at a price of one dollar each. In addition, the collection has one of Bennett's original paintings in oils of a picnic on Goat Island. Also of note is a rare set of eight small lithographs of 1831 by George Catlin, which contains two maps of the falls area and an unusual and delightful bird's-eye view. Even earlier, Thomas Hanford Wentworth of Oswego produced a set of five views of Niagara and a wrapper advertising the engravings, dated June 1821.

The most dramatic oil painting in the Niagara collection is by the French artist Hippolyte Sebron, who was working in the United States from 1849 to about 1855. It shows violent clouds gathering over the powerful falls, the *Maid of the Mist* below, and small figures being blown by the wind in the foreground, standing on a remnant of Table Rock. Other earlier but equally romantic views were painted in oils by an American, Alvan Fisher, c. 1821, and by J.W. Carmichael, an English marine artist, who included voyageurs in his impressive work of 1837.

The study of this collection's Niagara material pro-

vides a continuously changing picture of the falls, of the landmarks of civilization which gradually surrounded them, and of the tourists who unwittingly helped to destroy the attraction. It is recorded that most of Table Rock had disappeared by 1850, and its rival for the best viewing spot, the Terrapin Tower, was torn down in 1873, 40 years after it was built. Sylvan paths around the falls became concrete, picturesque ladders evolved into ugly enclosed staircases, quiet rowboats gave way to steam, and ferries were replaced by bridges. The trees, abundant in the early pictures when they provided a natural frame for picturesque views of the falls, were gradually removed to make way for concrete.

The writer who complained that the noise of the cataract was drowned out by a hissing steam engine was not as awed by his view of Niagara as were some of the more fortunate visitors who gazed upon the "thunder of waters" in the wilderness. Nonetheless, although man has diminished the mystery of this natural wonder, he has not yet destroyed the rainbows or the veils of mist that inspired early artists.



"Grand Trunk single arch double track steel bridge over the Niagara River". Engraving by John A. Lowell & Co., Boston, 1898, 52.8 cm × 81.1 cm. The old suspension bridge built in the 1850s was replaced in 1896–97 by this stronger, single arch steel structure, which is still in use.

Honor de Pencier joined the ROM in 1977 as Curatorial Assistant in the Canadiana Department. Born in Winnipeg, she graduated from the University of Manitoba, and taught school in Toronto after attending the Ontario College of Education. Her first association with the ROM was in 1966, when she catalogued books in the Sigmund Samuel Collection. After working with the Members' Committee for six years, she returned to the University of Toronto to study fine arts; her special research interest is Canadian historical pictures.





Right: St. Hilda of England turning the snakes into coils of stone.

Opposite page: The Pahvant Ute Indians believed that a trilobite necklace of Elrathia would keep them from being wounded by the white man's bullets.

Magic and Myth Fossils in Folklore

AGIC IS KNOWN by many names and takes many forms. It is witchcraft and it is religion; it is superstition and it is legend; it touches our private lives and it pervades our communities. The medieval demonologist Martin Delrio defined magic as "an art or skill that, by means of a not supernatural force, produces certain strange and unusual phenomena whose rationale eludes common sense..." From earliest times, man has sought ways to affect both the natural forces and the temporal influences that govern his life: the sun, the moon, the stars; potency, health, and wealth. St. Augustine (A.D. 354–430) said, "Man seeks the magic arts, not for themselves but for earthly happiness or from an over-

Man shares with other primates a deep curiosity about the things around him. In attempts to explain his world, he has often attributed magical or mystical powers to natural objects—among them several types of fossils. We shall never know who the first fossil collector

powering curiosity." But how do the fossilized remains of longextinct plants and animals fit into this complex world of magic? **David Rudkin and Robert Barnett**





The "stone swallows" of China (see cover), famous for their curative powers and suitable for imperial tribute, would fly during thunderstorms.

was, or what he thought of his discovery, but we do have evidence of the collection of fossils from as early as the Lower Palaeolithic period, the Old Stone Age. As these cultures did not keep written records, we can only speculate about their interest in these fossilized remains.

In his pioneering article on the subject, "Fossils in Folklore", Kenneth Oakley of the British Museum detailed numerous fossil finds in archaeological digs, and postulated the existence of regular and widespread trade in these items among the Palaeolithic cultures of Europe. The extent of this trade, in both fossils and shells, can be easily demonstrated. During the Palaeolithic, bivalve (clam-pelecypod) and gastropod (snail) mollusc shells were used extensively for ornamental purposes. For example, the dwellers of the Grimaldi caves near Menton, France, must have, on occasion, been clad almost completely in shells. In one cache were found 8,000 small shells, which had apparently been used in necklaces, bracelets, and headdresses. The shells were usually perforated and strung together, along with the vertebrae of salmon and the canine teeth of male deer. One type of Eocene gastropod (50 million years old) found in the Grimaldi caves is known in France only from rocks near Cherbourg, almost 1000 km away. Two gastropods found in a Magdalenian layer at Laugerie Basse, France, can be found today only in Eocene deposits on the Isle of Wight. Of the four portable objects of culture recovered from the famous Lascaux cave of France, one is a fossil gastropod. This gastropod, Sipho menapiae, as far as we know, occurs only in the Pliocene beds (5 million years old) of Wexford, Ireland, and the Isle of Man.

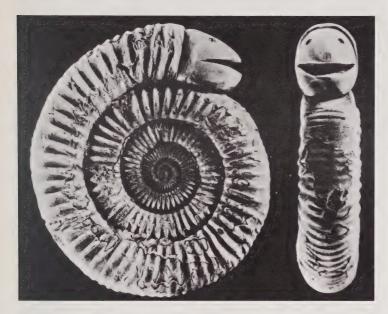
But it was not just gastropods that were collected during the Palaeolithic. From a Magdalenian layer at Arcy-sur-Cure, France, a Silurian trilobite, *Dalmanites hawlei*, has been recovered—perforated to be worn as a pendant. The find was so interesting that the site was named La Grotte du Trilobite. What is remarkable is that this particular trilobite is not found in the rocks of France but probably originated in Germany, some 2000 km to the east.

Within recorded history there are three major related spheres in which fossils figure prominently: religion, magic, and medicine. In India from the 5th century on, ammonites of the family Perisphinctidae have been revered as the embodiment of the god Vishnu. These Upper Jurassic ammonites come from the Spiti and the Niti Pass region and are still traded throughout India as religious fetishes. A cup of water in which one of these sacred ammonites has been steeped is said to wash away sin and ensure temporal welfare.

The Christian church claims a number of saints whose miracles involve fossils. The legend of St. Keyna told in *The Natural History of Selborne* (1789), and that of St. Hilda recorded in the *Britannia* (1586), are but two examples. St. Hilda (b. 614) was the founder of Whitby Abbey and the foremost abbess of

Right: In England fossil sea urchins were sold as chalk eggs to cure the "acid humours" of the stomach or seasickness.

Below: An ammonite with a snake head carved on it, from the cover of Palaeontology, 1978.





Anglo-Saxon England. While seeking solitude in the forest for prayer and contemplation, she was disturbed by snakes. According to legend, she destroyed the snakes by turning them into coils of stone. Since Elizabethan times, ammonites (coiled cephalopods) from the Whitby area have been considered the products of St. Hilda's wrath, and have been worn as amulets.

Magic was man's first attempt to seek contact and harmony with the unknown. He felt that hidden spiritual forces existed and he tried to influence them for his own benefit by means of highly structured rites and incantations. Orpheus, the 3rd-century Greek poet, refers to an oracle, Ophites, as "the vocal stone in which dwells a soul...round, roughly black, hard; all over its circumference run sinews, like unto wrinkles." The Ophites was probably an ammonite, the fossil remains of an extinct form of cephalopod mollusc. Before consulting the oracle a suppliant would fast, and then he would bathe the ammonite in cold running water and wrap it "like an infant" before setting it in its shrine. Through the suppliant's chanting of spells, the "soul" of the oracle could then be encouraged to speak.

What may have started out as part of a Naturalist religion, based on a reverence for natural forces, became formalized by the priests, the medicine men, and the learned; through time the original principles became obscure, and we are left today with a handful of superstitions. The codification of myths and magic led inevitably to the rise of a separate class of people who became witch doctors and practitioners of folk

medicine. Cures involving fossils are legion, and the disorders treated range from blindness to impotency, from headaches to arthritis.

Perhaps the most widely used fossil material was amber, the fossilized resin of coniferous trees. It was probably first used medicinally during the Stone Age and is still employed in parts of the world today. A Roman legend endows amber with rather romantic origins. The god Jupiter became jealous of Phaethon and struck him down with a thunderbolt, hurtling him into the river Eridanus, where he drowned. Phaethon's three sisters, the Heliades—daughters of the sun, were distraught over the loss of their brother; so long did they weep that eventually the gods took pity on them and turned them into three poplar trees. Their tears, however, continued to flow, and legend says that when their tears fell into the river they turned to amber. Indeed, amber has long been an emblem of sisterly love.

Roger Forbes in his book *The Midwife and the Witch*, refers to several ancient and medieval beliefs regarding the use of amber in childbirth. Powdered amber, usually mixed with other medicines, was administered to women as a safeguard against miscarriage. During labour and delivery, amber was burned in the belief that the fumes were soothing. Probably the most widespread use of amber (dissolved in liberal amounts of wine) was as a pain depressant for women in labour.

Many other "medicinal" properties have been attributed to amber. It was said to ward off sore throats. A single amber bead worn as a pendant was alleged to



remove "chaff" from the eye of man or beast. Raw amber was given to young children to be chewed as a teething aid. In Argyllshire, Scotland, four beads were considered a cure for blindness. Amber was even used to stop nosebleeds. In the 10th century, Johann Meakenbach, a physician, discovered a way to make oil of amber. Since then oil of amber has been used by some doctors in the treatment of such diverse diseases as gout, rheumatism, asthma, whooping cough, hysteria, and bronchitis.

Another popular and widespread "medicinal" fossil was the ammonite. Many different cultures have thought the ammonite to be a petrified snake, and through sympathetic association have used it as a snake-bite remedy. The ancient Greeks also used ammonites in cures for blindness, impotence, and barrenness.

As early as the 4th century A.D., the Chinese believed that brachiopods of the family Spiriferidae, "stone swallows", flew about during thunderstorms. From the time that the *Thang Pên Tshao* was written (c. 660), these fossils were incorporated into numerous pharmaceutical texts, and so valuable and beautiful were the "stone swallows" that from the time of Li Tao Yuan they were collected as imperial tribute. The Lung-Chhüan Hsien Chih (c. 1762) describes their col-

lection and preservation: "People who like to do unnecessary things catch them (stone swallows) in nets. cut each one into two, and put them into a vessel with vinegar in it. Those which can move after being put in are supposed to be the best ones." In fact, what was being observed was the acetic acid (vinegar) dissolving the calcium carbonate of which the fossil was composed. The greater the amount of calcium carbonate, the greater the movement in the vinegar. The Pên Tshao Kang Mu prescribes "stone swallows" for dental problems and other maladies that we know today can be due to hypocalcaemia, or a lack of calcium in the body. Since the traditional Chinese diet lacked dairy products and therefore a source of calcium, an alternative source was required. Even if a large part of the calcium in the fossil was unusable, a certain variable percentage could, in acetic acid, form calcium acetate corresponding to the calcium lactate and other organic salts found in modern dietary supplements.

Another fossil seashell worth mentioning is the very common Jurassic oyster *Gryphea*. In England this oyster is referred to as the Devil's Toe Nail. During the 17th and 18th centuries, these fossils were used in Scotland to cure pains in the joints—again through sympathetic association which linked the contorted

appearance of the shell to the effects of arthritis and related diseases.

Several forms of fossil echinoids or sea urchins have been used for medicinal purposes. Two types particularly popular in British folk medicine are the hearturchin, Micraster, and the helmet-urchin, Echinocorys; both occur in the massive chalk deposits of England. In the early 1700s, specimens of the fossil echinoid Echine marinae were being dug from the chalk of Purfleet, Greenhithe, and Northfleet, and sold as chalk eggs. The fine-grained chalk inside these eggs was said by John Woodford (1792) to be the finest remedy for "subduing the acid humours of the stomach". Sailors particularly liked them for the relief of "acid humours" connected with seasickness. The clubspines of the fossil sea urchin Balanocidaris are common in the Jurassic and Cretaceous limestones of the Middle East and are frequently referred to in medieval writings as "jewstones", because they came from Judea. Again through sympathetic magic, because they looked like bladders, these spines were used in the treatment of bladder ailments.

The Roman historian Pliny in his Natural History tells of an object called by the Druids a "snake egg". According to Celtic tradition numerous snakes twining together during mid-summer produced a ball of froth. This ball was called ovum anguinum, and if it could be stolen from the snakes it had great magical powers. The ambulacral grooves of the sea urchin were said to be the areas where the snake had bitten the ball, and the ovum anguinum was thus highly prized as an antidote for snakebite and eventually for all poisons.

Opposite page: The Jurassic oyster Gryphea was used in medieval England as a cure for arthritis and related diseases.





Above: The Romans believed that they could foresee the future if they slept with a golden (pyritized) ammonite under their pillows.

Left: In medieval times amber was popular as a medicine for many problems encountered during pregnancy and childbirth. Among the types of fossil fish teeth used as medieval remedies, shark teeth were the most popular. Through sympathetic magic they were considered antidotes for snakebite and other poisons. A stranger use was found for the fossilized tooth plates of rays, which for centuries were referred to as toadstones. In the History of Serpents (1608), Edward Topsell gives elaborate instructions for obtaining the toadstone. The problem was to trick an old living toad into giving up his precious stone, for if the stone came from a dead toad

In Scotland it was believed that powdered belemnites, the remains of an extinct form of cephalopod, relieved watery afflictions of horses' eyes.



it had no power. The toad had to be placed on a red cloth; as the animal played he became very excited. According to Topsell "(they) cast out the stone of the head, but instantly they sup it up again, unlesse it be taken from them through some secret hole in said cloth; whereby it falleth into a cistern or vessel of water, into which the toad dareth not enter, by reason of the coldness of the water..." The toadstone was used as a remedy for dropsy, ailments of the spleen, bladder stones, and falling sickness. It could also be employed as an indicator of poison as it changed colour in the presence of any poison.

Mammalian bones and teeth were usually attributed to giants in Europe and dragons in the East. The famous skeleton of a 5.2-metre giant, formerly exhibited in the Town Hall of Lucerne, was assembled from fossil mammoth bones. The district of Pao Te Hsien in northwestern Shansi was one of China's main sources of "dragon bones". The fossil mammalian bones and teeth came from clay beds of the Lower Pliocene (5 million years old). According to Dr. Oakley these beds were mined every winter for more than 80 years, by local people wishing to supplement the seasonal agricultural work. In China, dragons guarded the Emperor, and brought rain in times of drought. Wealthy men who consumed the bones were convinced that they would enjoy the help of the dragon. The medicinal preparation of the bones was quite intricate: the bones or teeth were pulverized and put in a silk bag, the bag was then stuffed into the body cavity of a dead swallow and left overnight, and in the morning the medicine was mixed with other ingredients and applied as a poultice.

From this brief survey of the subject, we can see that fossils have played an important part in the magic, myths, and folklore of many cultures at many times. Perhaps one day you will hear someone say, "Take two trilobites and call me in the morning."

Robert Barnett joined the ROM in 1972 on attaining his degree in geology from Carleton University. Formerly a technician in the Department of Invertebrate Palaeontology, with extensive national and international field experience, Mr. Barnett is now an Exhibit Programmer in the Exhibit Design Department. A frequent speaker, Mr. Barnett's interests include the history of fossil collecting, myths and legends, and the earliest forms of life.

David Rudkin is a technician in the Department of Invertebrate Palaeontology. As a graduate of the University of Toronto in geology and biology, Mr. Rudkin's primary interests are in Lower Palaeozoic arthropods, and in the relationships of fossil organisms with their environments. He has travelled widely in North America collecting fossil material for the reference collections and for research purposes.





Recent Publications

A Freshwater Shell-less Mollusc from the Caribbean: Structure, Biotics, and Contribution to a New Understanding of the Acochlidioidea, ROM Life Sciences Contribution 116, Jessie J. Rankin, 124 pp., illustrated, \$5.00 paper

Distribution and Call Parameters of Hyla chrysoscelis and Hyla versicolor in Michigan, ROM Life Sciences Contribution 117, James P. Bogart and Alan P. Jaslow, 16 pp., illustrated, \$1.35 paper

The Non-Passerine Pleistocene Avifauna of the Talara Tar Seeps, Northwestern Peru, ROM Life Sciences Contribution 118, Kenneth E. Campbell, Jr., 208 pp., illustrated, \$10.00 paper

A New Species of Lioteres (Pisces, Gobiidae) from Kwazulu, with a Revised Checklist of South African Gobies and Comments on the Generic Relationships and Endemism of Western Indian Ocean Gobioids, ROM Life Sciences Occasional Paper No. 31, Douglass F. Hoese and Richard Winterbottom, 16 pp., illustrated, \$1.00 paper

Healed Injuries in Ogygopsis klotzi (Trilobita) from the Middle Cambrian of British Columbia, ROM Life Sciences Occasional Paper No. 32, David M. Rudkin, 8 pp., illustrated, \$0.75 paper

Apparatus for Research on Animal Ultrasonic Signals, ROM Life Sciences Miscellaneous Publication, James A. Simmons, M. Brock Fenton, William R. Ferguson, Michael Jutting, and Jerry Palin, 36 pp., illustrated, \$2.00 paper

Fossils of Ontario Part 1: The Trilobites, ROM Life Sciences Miscellaneous Publication, Rolf Ludvigsen, 96 pp., illustrated, \$7.50 cloth

The first volume of Fossils of Ontario introduces the palaeozoic geology of Ontario and provides a reference for identifying Ontario trilobites.

Studies in Ancient Peruvian Metalworking, ROM History, Technology, and Art Monograph 3, A.D. Tushingham, Ursula M. Franklin, and Christopher Toogood, 112 pp., illustrated, \$7.50 paper

The results of non-destructive tests performed on selected Peruvian artifacts from the Museo Oro del Peru while they were on exhibition at Toronto in 1976.

Ladders to Heaven: Our Judeo-Christian Heritage 5000 B.C. - A.D. 500, ROM, Suzanne M. Heim, 28 pp., illustrated, \$2.00 paper

A catalogue of the exhibition Ladders to Heaven.

Excavations at Altun Ha, Belize, 1964-1970, Volume I, ROM, David M. Pendergast, book paper 240 pp., illustrated, \$30.00 (case with book and folded architectural drawings and map)

The first of five volumes on the excavations of the Maya site at Altun Ha. Belize.

Hands On: Setting Up a Discovery Room in Your Museum or School, ROM, 184 pp., illustrated, \$9.50 paper In 1977 an experimental Discovery Room was opened to the public. This report describes the planning process and its implementation, lists the components in detail, and gives the results of an evaluation.

In Search of the Black Box: A Report on the Proceedings of a Workshop on Micro-Climates Held at the Royal Ontario Museum, February 1978, ROM, 106 pp., illustrated. \$8.50 paper

A detailed report on the proceedings of a workshop held at the ROM to examine means of protecting collections from constant climatic fluctuations.

Mankind Discovering Volume II: Evaluations—the basis for planning, ROM, Exhibits Communication Task Force with the assistance of Urban Design Consultants, 205 pp., illustrated, \$13.50 paper

The results of two visitor surveys contained in this report constitute a major part of the data collected for the development of an overall plan for ROM galleries.

Opportunities and Constraints: The first report of the Exhibits Communication Task Force, Royal Ontario Museum, ROM, Exhibits Communication Task Force with the assistance of Urban Design Consultants, 116 pp., illustrated, \$8.50 paper

In its first report, the Task Force surveyed in retrospect the preliminary stages of its work and took the measure of the main planning task ahead of it.

Oracle Bones from the White and Other Collections, ROM, Hsü Chin-hsiung, 280 pp., illustrated, \$20.00 cloth

A catalogue illustrating and transcribing about 3,000 fragments of oracle bones from the ROM's collections.

Reflections of India: Paintings from the 16th to the 19th Century, ROM, Milo C. Beach, 40 pp., illustrated, \$2.50 paper

A catalogue of the exhibition Reflections of India marking the 10th anniversary of the Shastri Indo-Canadian Institute.

Lands of the Bible

"Kingdoms of Nations Gathered Together"

Suzanne M. Heim

THE QUOTATION FROM ISAIAH (13:4) seems a fitting introduction to the ROM exhibition Ladders to Heaven: Our Judeo-Christian Heritage. Some 5,000 years of ancient Near Eastern art from diverse regions are represented, making the exhibition truly a cultural "gathering of kingdoms". These arts are essential to an understanding of the cultural backgrounds of the two biblical religions Judaism and Christianity, and it is this theme that runs through the exhibition, with the artifacts presented in a chronological framework.

The Bible is in essence a chronicle as well as a religious document. While the Age of the Patriarchs occurs historically in the Middle Bronze Age (early second millennium), it has its roots in earlier periods in the Near East. The geographical background of the first 11 chapters of Genesis is, in fact, Mesopotamia, not the Levant, and many personal and place names mentioned in Genesis are found in documents of Early Bronze Age centres, both in Mesopotamia and the Levant.

For a proper framework for this historical period and an understanding of how the civilization developed, one must go back to the early agricultural villages of the Neolithic period (eighth to fifth millennium). Domestication of animals and cultivation of cereals were the new features of settled communities, which had previously subsisted by hunting and gathering. Fine painted pottery is the hallmark of this period, as are "mothergoddess" or fertility figures such as the one illustrated from the exhibition.

During the fourth millennium, settlement expanded, and this resulted in emerging urban civilization. In southern Mesopotamia and Iran, this all-important phase (the Proto-Literate period) marked the beginning of writing and its use in record keeping. Ceremonial complexes have been excavated at several sites—the most important and elaborate one at Warka, the biblical Erech (Uruk; Genesis 10:10), where a high temple platform, the forerunner of the ziggurat, and a group of temples built on a mud-brick terrace were uncovered.

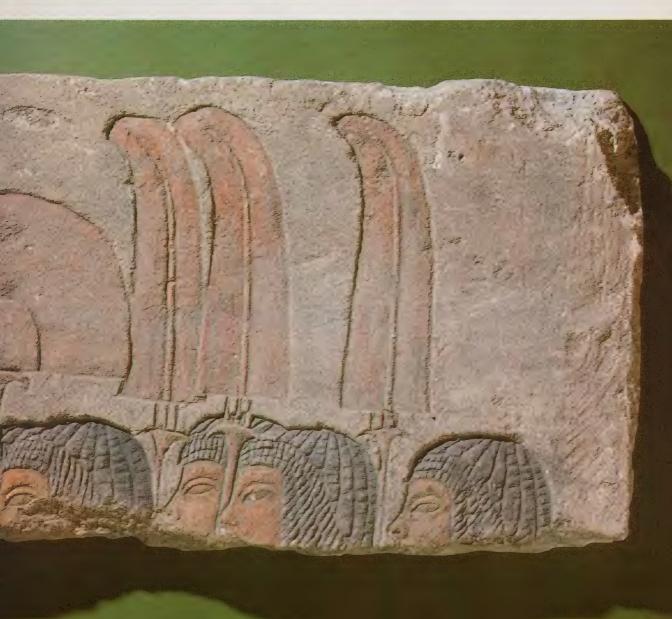
Out of the same environment in the lower Tigris and Euphrates river valleys grew the city states of the early third millennium. In these Sumerian centres, known for their intricate centralized economic and temple complexes, cuneiform writing developed more fully. Consequently, we know more





Left: Cylinder seal impression with bull and grain. Late Proto-Literate period, Mesopotamia. Height 3.1 cm.

Below: El-Amarna limestone relief with royal attendants. Reign of Akhenaten, Late Dynasty XVIII, Egypt. Width 40.0 cm.



about the Sumerian cities—from historical records listing their kings and gods and the interrelationships of the cities, which were frequently at war with one another. One of these cities, Ur, may be the one mentioned in Genesis (11:31) as the homeland of Abraham.

The basis of the economy of the city states was agriculture and trade, controlled to a sophisticated degree and dependent upon a centralized authority in each city state. A major task was the maintenance of the canal systems for irrigation and transportation; the breakdown of a canal system spelled disaster for the life of a city and made it vulnerable to attack.

Even before the arrival in Mesopotamia of a major group of Semites from the west, the Akkadians, we have evidence of Semitic-speaking people in Early Dynastic cities. Recently, at the important new archaeological site of Tell Mardikh (Ebla) in northern Syria, an extensive archive was excavated. The tablets, written in Sumerian and a Semitic language are related to languages in Mesopotamia and indicate close connections among major Mesopotamian and Syrian centres. Biblical scholars were elated to find among the personal names Abraham, Saul, and possibly David, as well as Ebrium, the name of a king, which recalls the Eber of Genesis 10.

The kingdom of Ebla was destroyed by one of the Akkadian rulers who took control of Mesopotamia and established a new dynasty, whose language was a Semitic one. Military strength and a new concept of kingship are the hallmarks of this period. A single ruler now commanded the loyalty of all the people. One of the most powerful kings, Naram-Sin, went so far as to proclaim himself "King of the Four Corners" (of the world) and indeed his might was felt as far west as Ebla in Syria and as far east as Magan, a centre for trade with the Indus Valley from which he claimed booty—the stone bowl illustrated bears his inscription.

The fall of this dynasty was at the hands of an eastern tribe, the Guti, who ruled briefly. Then for a short period the city states of Sumer emerged again; they renewed old traditions and emphasized temple building. Ur soon became the most powerful state, whose Third Dynasty was responsible for the construction of the impressive mud-brick ziggurat of the moon god and for extending the empire to southwestern Iran and northern Mesopotamia.

It was at the end of the third millennium that nomadic Semitic-speaking groups moved in from the northwest and weakened the stability of Mesopotamia and the Levant. These tribes of Amorites, referred to in the Bible (for example, Genesis 10:16) as a Canaanite group, were already known since Akkadian times and some had even settled in Mesopotamia. Their intrusions were generally repulsed, however, until the late Neo-Sumerian period, when they helped to cause the final breakdown of power. Amorite kings then sprang



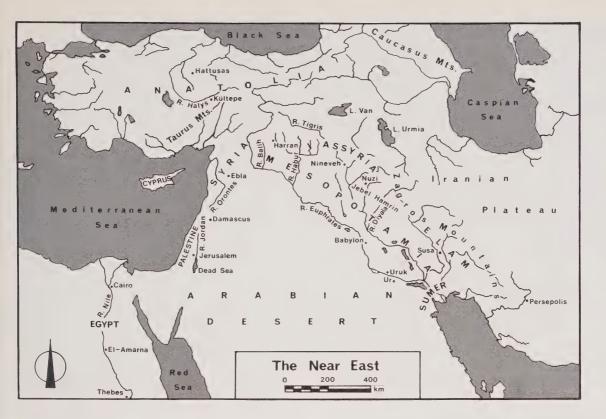
Top: Bronze curved sword with engraved lotus flower. Middle Bronze Age. Length 35.0 cm.

Bottom left: Painted terracotta "mother-goddess" figurine. North Mesopotamia or Syria, c. 5000–4500 B.C. Height 4.0 cm.

Bottom right: Stone bowl identified as booty from Magan, with the inscription of the Akkadian king Naram-Sin (2291–2255 B.C.). Height 3.7 cm.







up and exercised a certain amount of control until a mighty Babylonian figure came to power.

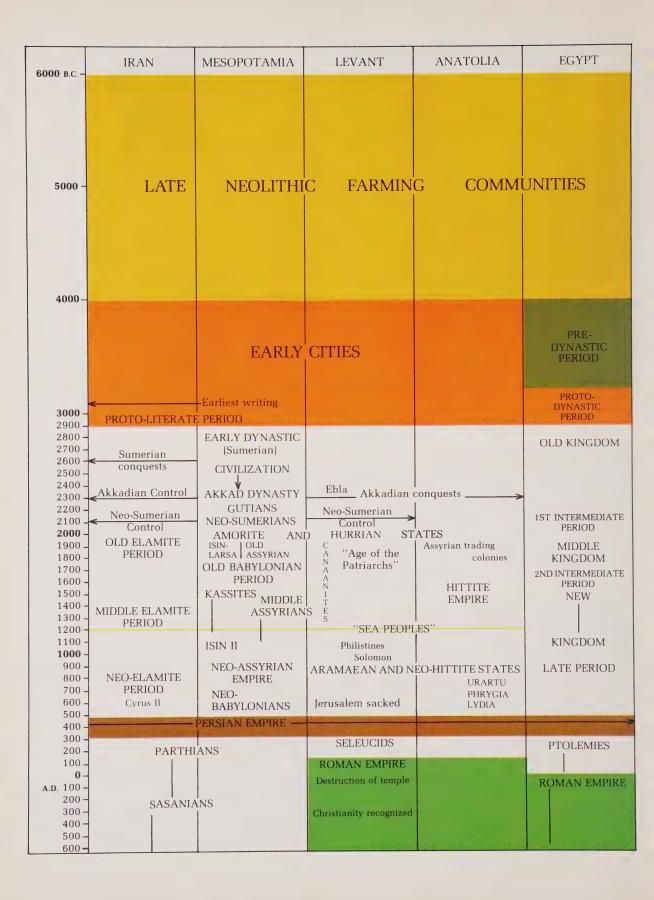
Early in the second millennium, in the Age of the Patriarchs, a change came about in the geographical locale of the Old Testament. Abraham moved his family from Ur in Mesopotamia to Harran in Syria (Genesis 11:31) which at the time was within the Hurrian empire (the Horites of Genesis 14:6). How the Hebrews of Genesis relate to the Habiru mentioned in Near Eastern texts is not clear. They may be a branch of a larger ethnic group or social class, generally called Habiru/Hapiru and often designated as foreigners, of whom some were settled and others were seminomadic. Finally the family of Abraham reached the land of Canaan (Palestine), which was one of the prosperous Middle Bronze Age centres at that time.

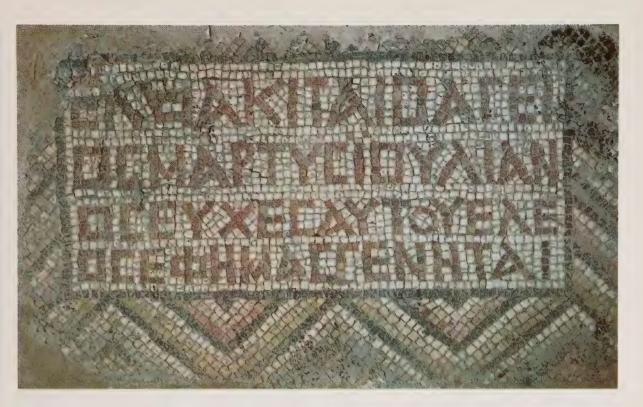
Of the prosperous centres, Egypt was one that dealt directly with Palestine, having long-term commercial interests there in the Middle Kingdom. The account of Sinuhe, the Egyptian official in exile in Palestine, and that in Genesis of Joseph's rise to power in Egypt provide us with details of life in both areas—as seen through the eyes of foreigners. In the arts, close ties are reflected in shared and mixed motifs and styles, especially in bronzes, vessels, and faience. The curved bronze sword illustrated dates from this period.

To the north, close connections are found between the Old Assyrians of northern Mesopotamia and the trading colonies established by them in central Anatolia. Tin and textiles were traded for silver and gold from Anatolia, and extensive archives excavated at sites such as Kültepe (Kanesh) attest to the sophisticated business arrangements.

It is not until Hammurapi of Babylon created a new empire that we have a long period of stability and unification in Mesopotamia proper. In subduing the independent kingdoms of Isin and Larsa, he brought the states under a central authority again. Hammurapi is of course famous for his legal code, established "to cause justice to prevail in the land . . . so that the strong may not oppress the weak . . ." One is reminded of the formulation of the Pentateuchal Law Code, written in the first millennium and based on customs hundreds of years old. Many of these traditions go back to the patriarchal age and are reflected in contemporary documents such as Hammurapi's collection of laws.

The Late Bronze Age period, following the Old Babylonian empire, is one that focuses on the rise to power and independence of several Near Eastern states, and the resulting struggles for power among them. This period is one of even greater internationalism than the previous ones, with more extensive trade and contacts and ever-shifting political alliances. The late Canaanite culture of the Levant had direct ties with New Kingdom Egypt—which virtually controlled the area in the Eighteenth Dynasty—and with the Hurri-Mitanni kingdom in Syria in the 15th century B.C. Hebrew customs of the patriarchal period with regard to property ownership, adoption, and inheritance can be better understood in the light of infor-





mation contained in tablets from Nuzi, a Mitannian site in northern Mesopotamia.

In the 14th century B.C. under Akhenaten, the heretic pharaoh, the Egyptians were in contact with local Canaanite rulers as the Amarna letters reveal. Along with talk of trade and politics, there are references to groups of Habiru who created disturbances in the area. We know that during the next dynasty (XIX) a group of Israelites worked in Egypt on temple construction projects (Exodus 1:11), which may have been those of Ramses II. He is one of the pharaohs sometimes cited as the king of the Exodus, although a strong possibility is Merneptah, who specifically recorded the defeat of the "people of Israel" on a victory stela.

The rulers of Anatolia, the Hittites, were also in touch with the Egyptian king. At Bögazköy (Hattusas), the Hittite capital, a large archive of texts was uncovered which revealed extensive contacts with the Hurrians, whom they eventually conquered and brought under their control.

To the southeast, in Mesopotamia, the Kassites succeeded to the rule of Babylonia. They were in continual conflict with their eastern neighbours, the Elamites in Iran, who are listed in Genesis (10:22) and reappear later in biblical history with the Exile.

As to the Canaanites themselves, we are familiar with their religion through local texts (Ras Shamra) and the highly critical accounts of their cults in the Old Testament. Their weather god, Baal, is frequently depicted wearing a horned helmet, symbol of divinity,



Top: Mosaic inscription in Greek from a church, the burial place of the martyr Julian. From the Levant (?), 6th century A.D. Width 85.0 cm.

Bottom: Stone relief of a menorah within a wreath. From a synagogue lintel, Palestine (?), 3rd to 4th century A.D. Height 51.0 cm.

and brandishing thunderbolts. The myth of his triumph over the waters is interestingly mirrored in descriptions of Yahweh of the Hebrews: "The God of glory thundereth: the Lord is upon many waters (Psalms 29:3)". The impact of local Canaanite culture on the Hebrews was clearly more than a cultural one, despite the prophets' consistent denouncement of the Canaanite nature cults.

The destruction of the Canaanite cities in the 12th century B.C. corresponds to a general collapse throughout the Near East. During the period of the Israelite Judges, the Philistines and the "Sea Peoples" dominated the Levantine coast, and it was not until the time of David, the Israelite king of the 10th century, that they were subdued. The kingdoms of Israel and Judah sprang up and the age of Solomon was a time highlighted by the elaborate building programme of the temple and palace. The Hebrews were in close association with their neighbours the Phoenicians. who were called upon to provide craftsmen for the construction (1 Kings 7). The furnishings of the temple have parallels in pagan Near Eastern objects such as ivories decorated with flowers, which have been found in Palestine and Syria, and bronze "trolleys" such as the one illustrated from the exhibition, small versions of the biblical ones, from Cyprus and Megiddo. Inscribed objects dating to this period are written in Early Hebrew script, related to the contemporary Phoenician script, and both derive from the secondmillennium Canaanite script.

To the north, the local states in Syria, with elaborate palace and temple complexes of their own, had to contend with the ever-increasing incursions of the Assyrians from northern Mesopotamia, who finally subdued them. Israel and Judah, too, had paid tribute to Assyria and they were eventually overcome and

Bottom left: Bronze openwork stand (trolley) with offering bearers, birds, and a "cherub". Cyprus, Late Bronze Age, 12th century B.C. Height 28.0 cm.

Below: Bronze figure of a weather god brandishing a weapon. Syrian, Late Bronze Age. Height 21.7 cm.



became vassals—after a series of campaigns. One of the most famous was that of Sennacherib, who "came up against all the fenced cities of Judah and took them" (2 Kings 18:13 ff.) when Hezekiah, King of Judah, had refused to pay tribute.

Following closely upon these days of turmoil, the Babylonians of southern Mesopotamia came to power and they presented a new threat to the Levant. Soon afterwards, Jehoiachin, King of Judah, was captured and taken to Babylon in 598 (2 Kings 25). Nebuchadnezzar II, with his army, sacked Jerusalem, destroying the temple in 587, and deporting much of the population.

The period of Babylonian captivity lasted about 50 years and then the Persian (Achaemenid) king Cyrus II allowed the Jews to return to Palestine, giving them more political freedom (Ezra 6:3–5). The temple, slated to be rebuilt in Jerusalem, was finally completed during the reign of Darius the Great (c. 515).

The Achaemenids were also in control of the eastern Greek world in Anatolia, and this naturally resulted in a meshing of some Eastern and Western art forms and styles. It was not until the time of Alexander the Great and his Seleucid successors, however, that Hellenistic culture permeated the Near East. While Greek objects and customs were imported and imitated in the Levant, the Parthians, a Near Eastern people, had their own empire to the east. As they controlled most of the caravan trade routes, they did come in contact with the Hellenistic centres and some cross-cultural traits are apparent.

With the formation of the Roman Empire at the end of the first millennium, Palestine was annexed in 63 B.C. Soon afterwards, the governor Herod, renowned for extensive building programmes, rebuilt the temple in Jerusalem (period of the Second Temple) to placate

the Jews. This and other activities were reported by Josephus Flavius, the Jewish historian whose accounts of the First Jewish War against Rome (A.D. 66–73) and the siege of Masada (A.D. 73) are major historical sources. It was at this time that the biblical Dead Sea Scrolls were hidden in caves at Khirbet Qumran for safekeeping. The temple, spiritual centre for the Jews, was itself destroyed in the sack of Jerusalem by Titus in A.D. 70.

During the next century, the Second Jewish Revolt took place (A.D. 132–35). It is illuminated for us in letters from Bar Kochba, its leader, found in caves near the Dead Sea. Finally the Zealots who lived in these caves were subdued and the Roman emperor Hadrian completely excluded Jews from Jerusalem. The holy city may not have been accessible, but soon after Hadrian's edict, new synagogues (with characteristic Roman basilica plans) were built elsewhere, especially in Galilee.

The world of the New Testament, which begins of course with the birth of Christ, is contemporary with the Roman Empire. The early Christians, too, endured much persecution; until the proclamation of Constantine (A.D. 313), which made Christianity the official religion of the Roman Empire, the Christians had to worship secretly. As a result, little representational art was produced until the 4th century A.D. when Roman sarcophagi were adopted for Christian funerary monuments and mosaics were made for church pavements.

The cultural heritage of both the Jews and the Christians is reflected in the history and diversity of the ancient Near Eastern world. It is the sharing in artistic and philosophical realms that links the pagan and biblical worlds, illustrating ties as well as differences—a bond emphasized in the exhibition in an ecumenical spirit.

Before joining the staff of the West Asian Department to work on the Ladders to Heaven exhibition, Suzanne Heim worked as a Curatorial Assistant in the Egyptian Department of the Metropolitan Museum of Art, New York, doing research on glass, faience, and jewellery for the new installation. Prior to this, Miss Heim was a Research Fellow in the Ancient Near East Department, and participated in archaeological excavations in Iraq and Egypt. Her special field is ancient Near Eastern art and archaeology with an emphasis on interconnections with neighbouring areas (the classical world and Egypt) and the minor arts. Miss Heim is in the final stages of her dissertation for the Ph.D.degree at the Institute of Fine Arts, New York University; her topic is ancient Iranian glazed wares.



The Growing Collections

The Canadiana Department has received an 18th-century French silver ragout dish, given in memory of Mr. and Mrs. J.W. McConnell of Montreal by their family.

The two-handled rococo dish was part of a silver service originally owned by the Godefroy de Tonnancour family, whose arms are inscribed on it. Louis-Joseph Godefroy de Tonnancour (1712–84), a king's representative in the government of Trois Rivières, amassed a fortune in the fur trade and as a supplier of merchandise to the state. He apparently ordered pieces for the service from different silversmiths in France over a period of time—a common practice among the wealthy in New France who did not always choose to support the local artisans.

On the underside of the rim this ragout dish bears the mark of Paul Soulaine, who was registered as a Master in Paris in 1720. On the front it has a discharge mark of a greyhound near the right handle, indicating that the necessary duty had been paid in Paris when the dish was made, sometime between 1744 and 1750.





Twenty-eight species not previously represented in the Mineral Collection have been acquired and registered in recent months. Most of these are rare minerals and can be seen only with the aid of a microscope. Although they cannot be displayed, they are important additions to the research collections. The majority of these specimens had to be purchased, and while they are relatively inexpensive compared to fine, display material, our budget for acquisition is still strained.

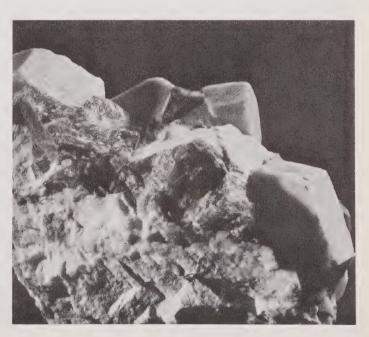
Exchanges were carried out with Dr. Ole V. Petersen of the Geologisk Museum, Københavns Universiteit, in Denmark, and with the Musée de Minéralogie de l'Ecole Nationale Supérieure des Mines, in Paris.

We were most fortunate to be given a magnificent specimen of cesium-rich beryl crystals (illustrated) from the Tanco Mine at Bernic Lake, Manitoba. The specimen measures 33 cm × 22 cm × 12 cm overall, and the largest of the white beryl crystals is 10 cm in diameter and 5 cm thick. We are extremely grateful to David L. Trueman, Chief Geologist—Explorations, who arranged this gift on behalf of the Tantalum Corporation of Canada Ltd.



Among recent gifts to the Greek and Roman Department, two of the most noteworthy are Apulian redfigure vases—a skyphos (right, height 9.8 cm) and a kantharos (left, height 17.6 cm)—donated by Mrs. F.F. Tisdall of Toronto. The vases, acquired by the donor's husband in London many years ago, are well-preserved but typical examples of the Apulian style of their period (both date from about 320 B.C.).

Prof. A.D. Trendall attributes the skyphos to the Amphorae Group and the kantharos to the Stoke-on-Trent Group. The vases will be included in the second volume (forthcoming) of Prof. Trendall's Red-Figured Vases of Apulia.







Recent acquisitions by the Department of Botany include about 350 specimens of lower plants from Switzerland. These specimens are part of a collection gathered between 1855 and 1880 and published as Schweizerische Kryptogamen. This material was issued in sets of 18 fascicles, each consisting of 50 plants. The earlier fascicles were prepared by Dr. B. Wartmann, a professor of botany and later a museum director in St. Gallen, and B. Schenk, a horticulturalist at Schaffhausen. In the later fascicles Dr. Wartmann collaborated with Dr. G. Winter, who was teaching at the technical university in Zürich. Algae, fungi, lichens, mosses, and liverworts are included, of which six collections represent plants previously unknown to science. A typical representative is the rust fungus Aecidium actaeae (illustrated above, on a leaf of European baneberry). The collections by Dr. Winter, who is best known for his classic work on the fungi of present-day Austria and Germany, are of considerable historical interest as very few of his other collections are extant.

Another important addition to the department's collections is the first fascicle of *Bryophyta Exsiccata*, a new set of Japanese mosses and liverworts. The Japanese Bryophyte flora, like the vascular plant flora, is extremely rich and contains many elements confined to that region, such as the moss *Rhizogonium dozyanum* (left). Also of interest is the high percentage of plants that are representative of disjunct or interrupted populations. It is remarkable that some of these Japanese plants are comparable, for example, with plants from the Aleutian Islands and the Rocky Mountains, while others are similar to plants found in eastern North America.

During the past year additions to the collection of portrait miniatures have been more than satisfactory, both as to quality and to quantity.

By far the most spectacular item is the gift of Harrison Fraser, Q.C., a portrait of Jane Seymour by Lukas Horenbout (1), which will be more fully published in a separate paper. An unusual miniature which must have been the lid of a snuffbox is a three-quarter portrait in profile of a man in uniform against a battle background (2). Identified as Frederick Eugene Duke of Würtemberg Stuttgart, he wears the Order of the Golden Eagle of Würtemberg and the red ribbon of the Order of Alexander Nevsky. The portrait, the work of Louis Nicholas von Blarenberghe, an outstanding 18th-century French miniaturist, is signed "von Blarenberghe" and dated 1767. The ROM obtained the miniature through the generosity of Mrs. Donald Early.

Another noteworthy acquisition, a gift of the Garfield Weston Foundation, is a portrait of Benjamin Franklin (3). Although by an anonymous craftsman, it is of superb quality. Mention should also be made of a portrait by George Chinnery of Captain Thomas Matthew Taylor (4), one of Major





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General Dundas (5) by George Engleheart, and a very fine one of the Honourable Miss Leeson (6) by George Hayter.

Finally, there is a George Vertue pencil drawing (c. 1750) of Thomas Boleyn (father of Henry VIII's second wife) after Hans Holbein (7)—again the gift of Harrison Fraser, Q.C. The portrait is drawn on the back of a sheet from a sketchbook (c. 1600) of Isaac Oliver which shows a most charming pencil sketch of a mother and child (8). It is not often possible to see on one sheet sketches from the hands of two artists of different periods—of such competence as these two. While displaying a double-sided picture presents a problem, the importance of the item will make us keen to overcome this minor difficulty.

With these, and with the addition of a generous loan from the collection of Mr. George Brady, we have been able to mount a second display case of miniatures for the pleasure of interested visitors. Because miniature painting enjoys a position half-way between applied art and fine art, it has never been satisfactorily established whether the responsibility for collecting miniatures lies with the art gallery or with the museum.











Below: Silver-gilt salver, Benjamin Pyne, London hallmark 1698–99. (Lee Collection)



The Huguenot Influence

English Silver of the Late 17th and Early 18th Century

Brian Musselwhite



HE REVOCATION OF THE EDICT OF NANTES in France in 1685 had a significant influence on English domestic silver during the final years of the 17th century and the first half of the 18th. Persecuted and denied the right to practise their Protestant religion, countless highly skilled Huguenot silversmiths, and other craftsmen, fled France. Within a short time, those who had settled in England helped to bring about a marked change in the style of domestic silver.

It can be argued that the change would have occurred even if Louis XIV had not agreed to persecute his Calvinist subjects, for the cultural influence of Paris and Versailles and the prestige of the Sun King were prodigious. France's neighbours were very impressed by her high standard in all the applied arts. and it was inevitable that the style initiated by such masters of design as Paul Ducereau (c. 1630-1713), Jean Berain (1637-1711), and Jean Lepautre (1618-82) would ultimately cross the French borders—especially after their ideas of French late baroque ornamentation were translated into forms more suitable for silver and reproduced in pattern books such as those of Mouton, Livre de Desseins pour toute sorte d'Ouvrages d'Orfèvrerie, and Masson, Nouveaux Desseins d'Ouvrages pour graver sur l'Orfèvrerie. These pattern books would have crossed the Channel without the help of the Huguenots, if for no other reason than that the patrons of the London silversmiths would have demanded the latest innovations from France. Thus though the change of style so apparent in English domestic silver from about the 1690s on was not wholly the result of the presence of the French Huguenot émigrés, the fact remains that both their presence and their pattern books accelerated the change. The native English silversmith was left behind, since he had relied on designs and traditions that had never been permanently recorded on paper.

From the Restoration of Charles II in 1660 to the Glorious Revolution of 1688, the dominant influence on English silver was Dutch; it manifested itself in the floral embossed ornamentation associated with Dutch 17th-century flower painting. With the ascent of William and Mary to the throne, the French influence be-

gan to predominate. It was fortunate for the Huguenot *émigrés* that William, though he was Dutch, favoured the French style in the field of the arts. He employed a Parisian Huguenot, Daniel Marot (who had first fled to Holland), as court architect and designer. The favourable climate was enhanced by regular payments from the Royal Bounty to those Huguenots who were in need: in 1690 and in 1702 parliament approved an annual grant of £15,000 for this purpose. Payments from the Privy Purse and funds raised by public appeal regularly supplemented the annual grant.

By the 1690s, the high standard of craftsmanship of the French émigrés was beginning to be noticed. Dutch embossed flowers were going out of fashion and the hammering out of designs was giving way to the application of ornament, although gadrooning and fluting were still produced by the old method. The fact was that the work of the Huguenot silversmiths was superior to that of their English competitors, who had cause to be alarmed.

Nonetheless, the Huguenot silversmiths encountered obstacles in London. The Goldsmiths' Company was not at all helpful. It refused the foreign Huguenots admission as Freemen of the Company, and according to the Company's 14th-century charter only Freemen of the Company were entitled to have their wares assayed. Thus a Huguenot silversmith had two paths open to him: he could either work for a London Master, or he could try to induce the Company to mark his silver. This problem continued for a number of years and it was not until 1725 that it was decided that the Company could no longer refuse to mark plate brought in for assay by non-members.

Through all the years of conflict the workmanship of the Huguenot silversmiths was having an impact. The French style required cast rather than embossed work, and the native English silversmiths were forced to accept higher standards or lose their market. Inevitably the style that developed by the mid-18th century was a blend of the two—the simple and severely plain forms of the native style and the richly ornamented forms preferred by the Huguenot artisans.

One of the most impressive silver pieces in the col-

Opposite: Goblet, glass with silver-gilt foot and stem. Anthony Nelme, London hallmark 1689. (Lee Collection)

Right: Cup and cover. London, 1696. (Bequest of R.B.F. Barr, Q.C.)



lection of the Royal Ontario Museum is a large silvergilt foot bearing a glass goblet engraved with the arms of William and Mary. It carries the London hallmark for 1689, the year of their coronation, and is stamped with the mark of the maker, Anthony Nelme, who was one of the most prominent working goldsmiths of his time.

The foot with glass goblet is basically the shape of a medieval chalice. The lowest part of the moulded bulbous stem of the goblet is fitted into a calvx of silver-gilt leaves, which rest on a circular collar above a hexagonal member. This in turn rests on a gadrooned collar, from which radiates the broad sexfoil base—the upper part plain, the lower decorated with spiral gadroons and fluting. The design is deceptively simple: each decorated part is balanced by an undecorated area, and the design creates a rhythm that is reinforced by the gadroon type of decoration of the glass goblet. The glass, which of course is the most important part of the design, must have met with an accident, which destroyed its lower half. Nelme has provided us with a design that while enhancing the glass is not overshadowed by it.

Although English born, Nelme worked in the Huguenot manner. Whether richly ornamented or severely plain, the large number of surviving pieces of silver bearing his cursive AN monogram are all of conspicuously high quality. Yet even though most of his works can be considered in the Huguenot style, he was one of a number of important goldsmiths in London who in 1697 signed a petition to be presented to the king. It stated that the refugees used great quantities of solder in their wares, thereby falsifying the weight of silver in an object, and that they had persuaded certain venal English silversmiths to have Huguenot pieces assayed as if they had been made by Freemen of the Company at Goldsmiths' Hall. The petition continued: "This will in all probability lead to the beggary and impoverishment of your petitioners." Nelme, at least, seems to have staved off "beggary and impoverishment", for he set up his shop at the Sign of the Gold Bottle, Amen Corner, Ave Mary Lane in 1685, and there he stayed throughout his entire career. It is not known how he first became aware of the style that was to become known as Huguenot, but it is possible that he employed French journeymen in his workshop.

The two-handled cup and cover was not a new shape; it had appeared in various forms from as early as the 16th century and had evolved through a series of functional silver articles—the ox-eye cup, the caudle cup, the porringer, and finally the two-handled cup and cover. The earliest examples were usually very plain with simple engraved decoration. After the Restoration, the Dutch influence was reflected in the embossed flowers and foliage over a pear-shaped body. Towards the end of the 17th century, this shape was superseded by one with almost parallel sides. During this period, the English form differed from the Huguenot, which tended to have a slightly narrower body and frequently harp-shaped handles rather than Scurved ones. The cup and cover in the ROM collection, hallmarked for 1696, has S-curved handles, which are very pleasing-probably one reason that the Huguenot silversmiths eventually discarded the harp-shaped handles.

By 1680 cut-card work in the form of acanthus leaves began to make its appearance at the juncture of the foot and body and also on the lid. This French feature was most appropriate for a piece of presentation plate, for in its austerity and simplicity it had a formal character.

The simple, elegant engraving of the arms of George Booth, second Earl of Warrington, enhances the bold simplicity of the cup and cover. George Booth came of age in 1697 and the cup may have been made in honour of his 21st birthday. It is unfortunate that we do not know the name of the Huguenot maker of this piece, but the original mark has been overstamped with a second mark, making the original illegible.

The exceptionally fine silver salver from the ROM



Above: Salver, Simon Pantin, (one of three), London, 1731.

Right: Pair of tea caddies, John Farnell, Britannia Standard, London, 1720.



collection, with the London hallmark of 1698-99, was made by Benjamin Pyne, an English-born goldsmith who worked in the Huguenot manner. It is similar to a superb silver-gilt pair, parts of a toilet service, made by Benjamin Pyne in 1698 and now in the Victoria and Albert Museum. Although the ROM salver lacks the chased ornament (in the manner of Jean Lepautre) on the broad rim, the cast borders are identical to the Victoria and Albert examples, so it is probable that it came from the same set or service, since all three pieces contain as their central decoration the arms of Sir William Courtenay of Powderham Castle.

In fact, the lack of ornamention on the broad rim of the ROM salver simplifies the shape and enhances the unusual form of the salver. Not visible in the photograph are the little padded animal feet under each point of the hexagon. They are very unusual since this type of motif did not become popular until the following century.

The reigns of Queen Anne (1702-14) and George I (1714–27) brought a change. One might expect the silver of that period to reflect the French tradition of elaborate shape and ornamentation and the influence of George I's German background, but this is not the case. After two generations, the preference for sim-

plicity and basic form reasserted itself.

The two striking little tea caddies illustrated, deceptively simple in design and proportion, were created by John Farnell and are stamped with the hallmark of 1720. They are very similar to a caddy in the Victoria and Albert Museum, which is engraved with a crest that distracts the eye. The high price of tea in the 17th century (though it was to become even higher in the 18th century when it was taxed) was reflected in the smallness of the objects associated with storing, making, and pouring tea, for example, tea caddies, tea bowls, and teapots. Before 1700 the tea caddy was very rare and the earliest surviving caddies date only to 1682. The origin of the shape of the first tea caddies (or canisters, as they were called in the 17th century) was probably a Chinese porcelain prototype, and the form that was preferred at first was the rectangular or octagonal, with a cap on it suitable for use as a measure.

One of the key figures among the second generation of Huguenot goldsmiths was Simon Pantin, who is represented in the ROM collection by three salvers of identical shape and size. The influence of Pantin's master, Pierre Harache, and Pantin's own ability are evident in the restrained use of ornamentation and the simplicity of design, which distinguish the work of both artisans. The perfection of form and excellent proportion of salvers are remarkable when one considers that they were produced by hand from an ingot into a sheet of flat silver-one of the most difficult feats of the silversmith's art. The production requires even more skill when the flat surface is not to be covered with engraving, which would hide any flaws.

The continuity preserved by the *émigré* silversmiths was to be expected. The opposition and hostility of the London silversmiths forced the Huguenots to create a close-knit community in which they supported and taught one another. Huguenot masters had Huguenot apprentices and rarely was an English apprentice to be found in a Huguenot workshop. Soon after 1690 Simon Pantin was apprenticed to Pierre Harache. By 1701 Pantin had taken his first apprentice, Augustin Courtauld, and in 1716 Augustin Courtauld took Isaac Ribouleau as apprentice, and in this way the continu-

ity of style was secured.

The Restoration introduced a number of foreign customs, among them the brewing of punch from five ingredients: fruit juice, spices, water, sugar, and wine or liquor. Related to this convivial ceremony was a piece of silver commonly known as the lemon strainer or the orange strainer. It was not an entirely new type of silver object created in the 17th century, for the first documented strainer appears in the 1533 inventory of the Royal Jewel House. As was the case with so many other silver objects, the strainer's purpose had probably changed with the customs of succeeding genera-





Above: Lemon strainer, probably by James Savage, London, 1734. (Bequest of I. Ogden and P.T. Woodruff)

Left: Cup and cover, Charles Hillan, London, 1740. (Bequest of Estate of Mrs. G. Howard Ferguson)

Below: Sauce boat (one of a pair), John Barbe, London, 1740. (Bequest of Miss Aileen Larkin)



Below: Cake basket, Peter Archambo, London, 1740. (Anonymous loan)



tions, and certainly the earliest strainers are not likely to have been used in the brewing of punch. The strainer from the ROM collection, hallmarked 1734 and probably by James Savage, is of the small size that was most popular during the 18th century and has two handles (the earlier Queen Anne type had only one handle). The bowl is superbly pierced and the handles are well wrought.

The silver of the period of George II (1727–60) was characterized by a blending of the two earlier preferences—the simple bulky forms of the English style and the rich ornamentation of the Huguenot tradition. A comparison of the earlier cup and cover dated 1696 with the superb example of the fully developed form

of cup and cover by Charles Hillan, hallmarked 1740, demonstrates the evolution of this object and the development of the Huguenot tradition. The cover of the earlier Carolean cup was usually flat or very low in profile, but the height was gradually increased until by the 1720s a pronounced dome had developed. To balance the silhouette and create better proportions, the body was raised slightly higher off the foot by the insertion of a short stem. Although the Hillan piece is not one of the earliest examples of this style, it does reflect an important design, with its vigorously sculptural handles, fine proportions, and contrasting plain surfaces and applied ornament. The crest is that of Philip, 5th Viscount Wenman of Tuam.

The richness of effect which began to dominate the regularity of form had developed into an expression of the English rococo by 1735. Ornament, which had been close to the body of the vessel, became higher in relief and more naturalistic. The rococo style was French in origin, deriving from the rocaille (rockwork) developed in Paris during the 1720s, and its chief characteristics were naturalistic, asymmetrical designs. It is not hard to see the spirit of the rococo in such pieces as the Hillan cup and cover, or the pair of sauce boats, possibly made by John Barbe in 1740. The maker's mark is somewhat indistinct, but the quality of the pair is very evident.

The sauce boat was a new silver article, originating in the reign of George I. A much quoted remark attributed both to Voltaire and to Carraccioli, "in England there are sixty different religions and only one sauce", oversimplifies the state of English sauces and religions, for if the English had only one sauce they served it from a multitude of silver and porcelain shapes and styles.

The first sauce boats were double-lipped, with a handle at either side and an oval or octagonal foot. Unfortunately this design was not as functional as it should have been, and the overflowing of the contents of the vessel necessitated a new design, which quickly developed into the boat-shaped sauce boat, of which the ROM example illustrated is a variation. Its design is totally rococo in flavour, while the silhouette retains a practical shape, reflecting earlier Huguenot forms. Unfortunately the armorial remains unknown.

In the same rococo vein is the marvellous cake basket by Peter Archambo made in London in 1740. The basket was not a new type of silver object; it had in fact originated at the end of the 16th century. The earliest examples tended to be circular, and it was not until after 1700 that baskets generally took the accepted oval form. Earlier examples also had fixed handles; the swing handle did not appear until 1730. From 1735 on, the variety of pierced, foliate, and geometric ornament on baskets is endless. The sides of the Archambo basket curve out from a base of considerably smaller compass. The bowl is constructed of one piece of metal, with cast and applied foot rim. The iconography of the decoration is extensive, incorporating cherubs, animal mask forms, grains, grapes,

and poppies. The large size of the basket and the armorial in the bowl emphasize the importance of this masterpiece of the silversmith's craft.

Another rococo piece in the ROM collection is a small silver-gilt cream boat made about the middle of the 18th century, probably by Nicholas Sprimont, the gifted silversmith who later (with his French partner Charles Gouyn) took charge of the Chelsea porcelain factory. In doing so he created something of a paradox, for he introduced silver forms to porcelain, and as the porcelain works gained popularity, the market for the work of other silversmiths diminished. Nonetheless, the ROM cream boat demonstrates the great ability of an important craftsman, whatever the material he chose to work in.

It is not known where the design of shells on the cream boat originated—whether from one of the many travel books that appeared at the time or from shells brought back to England. We do know, however, that each of the shells is a perfect replica of a known shell from the Indian Ocean. It is truly an ingenious design. incorporating the abalone and the limpet back to back. to create the foot of the vessel, while the haphazardly spiralled handle copies the Indo-Pacific snail shell. The shell forming the body of the cream boat is probably the silversmith's interpretation of the Onion Tun, a shell that has ribs flowing in a clockwise direction and takes its name from the tun or wine cask. Each silver-gilt ridge on the Sprimont piece is enhanced by designs of small shells, easily recognizable as the shells of whelks, oysters, and variations of the Venus clam.

A more sober piece of Huguenot silver is the very beautiful coffee pot of 1747 by Pezé Pilleau, which is more in keeping with earlier types. Coffee was first introduced into England from the Near East between 1649 and 1660. One of the early references to the beverage is found in a passage of John Evelyn's diary dated May 1637: "There came in my time to the College one Nathanial Conepios, out of Greece...He was the first I ever saw drink coffee; which custom came not into England till thirty years after." Evelyn overestimated the time coffee took to become established in England for by 1652 London already had a number of coffee houses, and by 1700 it had more than 400.

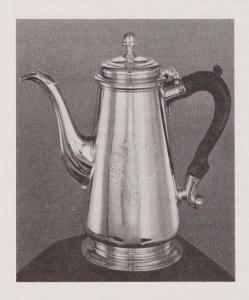
The earliest surviving coffee pot made in England bears the hallmark for 1681. It is a tapering cylindrical form with an incurved conical cover. The shape is extremely plain, simple, and functional, and was probably inspired by Near East originals. This form, as well as the hexagonal, was very popular in England for more than 40 years, and many examples survive. The handle was either opposite the spout or, in the continental manner, at right angles to it.

The elegant handle, with its double scroll form, was introduced about 1710. Its shape and the use of wood in its production were functional, for the thumb rest tended to stabilize the pot while coffee was being poured from it, and the wood did not conduct heat.

Below: Cream boat, silver-gilt, probably by Nicholas Sprimont, London, c. 1745–50.



Below: Coffee pot, Pezé Pilleau, London, 1747. (Purchased with the assistance of R.G. Meech, Q.C.)



The same basic form of pot was used for coffee, tea, and chocolate. In the 18th century, however, teapots tended to be made of porcelain, in the shape with which we are familiar today.

In the 1730s the base of the cylindrical body of the coffee pot began to be curved out slightly over the moulded foot rim, and it was this modification that created the restrained silhouette. It is obvious from the simple beauty of the ROM example illustrated that the Huguenot silversmith did not have to work in the latest style to create a masterpiece of design and elegance. Once again, the crest is unknown.

Throughout the 18th century objects imported from China influenced many English silversmiths. Flat-

Tea caddy, Augustin le Sage, London, 1768. (Anonymous loan)



chased chinoiserie motifs had decorated many of the English pieces made between 1680 and 1690. The asymmetry of the rococo combined with chinoiserie to form an increasing spirit of fantasy suited to another wave of chinoiserie, this time exuberantly expressed in embossed work.

By the middle of the 18th century, the rococo style began to fade as a revival of interest in the antique (with the discovery of Pompeii and Herculaneum) exercised a discipline over artistic rules. The frivolities and excesses of the rococo had no place in a movement that extolled the virtues of an ancient time and place. Nonetheless, in neoclassical guise, the taste for the exotic continued to influence silversmiths, though to a much lesser degree. The archaeological spirit of the neoclassical had an effect on the adaptation of Chinese motifs and produced a chinoiserie that was more in keeping with the genuine Chinese object.

It was this neoclassical chinoiserie that produced a new variety of silver tea caddy, constructed in the manner of a square slatted wooden tea chest engraved with Chinese characters. The silver caddy illustrated, made in 1768 and bearing the hallmarks of the Huguenot silversmith Augustin le Sage, has a close affinity with the oriental tea chests shipped to England in the 18th and 19th centuries. The tea flowers and buds on the top of the caddy (which were not to be found on the wooden tea chests) were introduced merely as a convenience in raising the lid.

The original wooden tea chests were decorated

around the edges with paper designs imprinted with the importer's name. The Chinese characters on the le Sage caddy read I-Ch'ang and roughly translate, "Profit and abundance are to be found in honest dealings with customers." It is evident that the silversmiths were not familiar with the meanings of the Chinese inscriptions, for some caddies include the inverted characters for "This side up".

One of the best and best-known Huguenot silversmiths of the 18th century was Paul de Lamerie. He was born in 1688 at Hertogenbosch in Holland, but by 1691 his family had settled in the parish of St. James, Westminister. In 1705 Paul de Lamerie was apprenticed to the London Huguenot silversmith Pierre Platel, and on 5 February 1712 he registered his mark. It has been suggested that his popularity was attributable largely to the fact that he managed to create silver pieces that were always slightly ahead of the changes in style between 1715 and 1750.

De Lamerie's sale list and insurance assessment for 1728 indicate that he and his contemporaries were already practising a system that was to facilitate the industrialization of the trade. While the continental silversmiths continued to work mainly to fulfil commissions, the English silversmiths were beginning to keep large supplies of wrought silver in stock—to be sold to the casual buyer. The most ornate pieces of course were still made to order, but the majority of the pieces the silversmiths turned out were conservative in style and easy to market.

The pair of candlesticks by Paul de Lamerie, hall-marked 1749, reflect both the English conservatism and the Huguenot tradition that marked so much of the English silver of the 17th and early 18th century. The engraved crest is that of the Duke of Norfolk.

Sobriety, combined with elegance and sophistication of form, and the restrained character of the ornament are the features of 18th-century English silver that are most admired today. The Huguenots deserve much of the credit for bringing to England a new style of craftsmanship and ornamentation that within a remarkably short time altered the art of the silversmith and created one of the greatest periods in English silver.

Brian A. Musselwhite joined the ROM in 1977 as a technician in the European Department. He was born in Toronto, received his B.A. in fine arts from the University of Toronto, and is at present working on his master's in museology. Mr. Musselwhite teaches two night courses on antiques and a ROM Saturday Morning Club class; his lectures for Extension Services have sent him all over Ontario. When not working with the European collection, his interest is the 19th-century photographic image.





